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AUG 01 2005

30 July 2005

Re: Application No. 10/031,776 - resubmission of supplemental appeal brief.

Dear Sir/Madam,

Please find attached three copies of a new version of the supplemental appeal brief, in response to the notification of non-compliance with 37 CFR 41.37 which was sent on 07/13/2005. This supplemental brief is in response to the action which sent to me on 07/21/2004 (non-final rejection after reopening prosecution).

I will send another terminal disclaimer with respect to Harpaz 6,568,683.

I have made the following corrections:

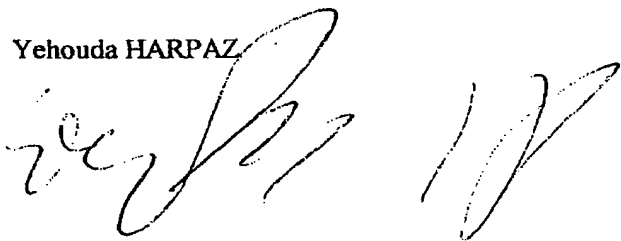
- 1) Remove the heading "Grouping of Claims".
- 2) Change the numbering of sections 7 and 8 (used to be 8 and 9).
- 3) Added a concise statement in section 6 concerning the provisional obviousness-type double patenting with 10/031890 and 10/031942
- 4) Put the discussion of the provisional obviousness-type double patenting under a separate heading (section 7.c).
- 5) changed the numbering of sub-section 7.d, 7.e and 7.f (used to be 8.c, and 8.d and 8.e respectively).

I believe I have corrected all the points that were raised in the notification.

Please note that I am not represented by a registered practitioner, and, if my understanding of the first paragraph of 37 CFR 41.37(c)(1) is correct, that means that I don't have to substantially comply with (c)(1)(v) and (c)(1)(vi).

Thanks,

Yehouda HARPAZ



**Yehouda Harpaz**

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Cambridge CB1 3QQ  
UK

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Email yeh@maldoo.com

30 July 2005

Re: Application No. 10/031,776 - supplementary appeal brief

- 1) *Party of interest:* Yehouda Harpaz (sole inventor).
- 2) *Related appeals and interferences:* There are no related appeals or interferences.
- 3) *Status of claims:* Claim 1 - Rejected.  
Claims 2-7 - cancelled.  
The appeal is against the rejection of Claim 1.
- 4) *Status of Amendments:* There are no amendments subsequent to final rejection.
- 5) *Summary of claimed subject matter:*

**Claim 1:** The means in Claim 1 is an electronic board which is played by touching points, with a novel behaviour. The behaviour is that, except playing in turns, the sole rule is that a point is a legal move if its 'visibility' for the player is above or equal to some fixed number. The 'visibility' of a point is determined by the board by checking in turn each of a predefined set of imaginary straight lines emanating from the point. If the line does not pass through any illuminated point, it is assigned a value of 0. Otherwise the line is assigned a value of 1 if the closest illuminated point that it passes through is illuminated in the colour of the player, or -1 if it is in the opponent's colour. The sum of the values of the lines is the 'visibility' of the point for the player. The game ends when neither of the players has a legal move, and the player with more points of his/her colour wins.

The board itself is described shortly in the first paragraph of page 2 (lines 1-18), and the conceptual structure of the board is shown in abstract in Figure 1. A more detailed description is given in page 5, lines 8-38, and Figure 2 gives more details of the construction of the board.

The behaviour of the board, which is the main novelty of the claim, is described shortly in page 2, second paragraph (lines 21-31). It is then discussed in length in the last three lines of page 3 and all of page 4. It is illustrated in Figures 4 and 5, but the text on page 4 must be consulted to understand the figures.

The function of the construction in Claim 1 is to produce a novel and innovative game that is simple to play but has a considerable strategic depth, and therefore is a very interesting game. This is discussed in the last paragraph page 5 (line 37-47). This game cannot be realistically played without the construction of claim 1.

6) *Grounds for rejection:*

**Double patenting:** Claim 1 was rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent 6,568,683. This is discussed in section 7.b below.

**Provisional Obvious type double patenting:** Claim 1 was provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over the claims of copending applications 10/031890 and 10/031942. This is discussed in section 7.c below.

**Claim rejections - 35 USC 102:** Claim 1 was rejected under 35 U.S.C. 102(e) as being anticipated by Golad 6,231,441. Discussed in 7.d below.

**Claim Rejections - 35 USC 103:** Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Blumberg et al. (5,417,425) in view of Othello (Shadow125 Java Applet). Discussed in 7.e below.

## 7) *Argument:*

### (a) Novelty and non-obviousness of Claim 1

(a.1) As I wrote in (c.5) in the appeal brief, the idea that is expressed in lines 14-22 of Claim 1 of the current application (starting with "when a player touches a point..."), is a combination of the following elements:

- (1) Look at distant points beyond unilluminated points, rather than only illuminated neighbours.
- (2) Use the first illuminated point that is encountered to define the value for a direction (1 for player's colour, -1 for the other colour).
- (3) Sum the values in all directions, rather than just checking if any of the directions fulfils some condition.
- (4) Use the result to decide if a move is legal.
- (5) Use this evaluation as the sole determination of the behaviour of the board during the game, rather than make the evaluation just part of the rules of the game.

(a.2) Element (4) is the only element that can be found in the documents that were found by the ISR and the search in the USPTO, except my own applications. In my first application, (application GB 9907163.1) elements (3) and (4) appear, but not in a combination (they appear in separate games). Element (5) is completely new in the priority document of the current application (GB 9919551), and it is an important innovation, because with simple behaviour it generates a game with considerable strategic depth. It may be possible to dig out documents that show one of elements (1) (2) or (3) on its own, but I am not aware of such documents, and searches don't find them. I am sure that no combination of any two of elements (1)-(4) appears in any prior document. Thus even each element of (1),(2) or (3) on its own is not that obvious, combining any pair of elements (1)-(4) together is quite non-obvious, combining all of them together is very non-obvious, and combining them with element (5) is very non-obvious.

(a.3) The combination of all these elements together generates a behaviour that is radically different from anything that have been published until now in any context, including all the documents that were cited by the examiner or in the international search report (excluding my other applications which may mention it, but has the same or later priority date). This is true not only in the context of electronic boards, but also video/computer games and classical games. This can be verified by scanning the catalogues of toys and games companies, for example:

<http://www.hasbro.com/games/>

or an online directory of board-games, for example:

[http://directory.google.com/Top/Games/Board\\_Games/](http://directory.google.com/Top/Games/Board_Games/)

<http://www.board-games-directory.com>  
[http://dmoz.org/Shopping/Toys\\_and\\_Games/Games/Board\\_Games/New/](http://dmoz.org/Shopping/Toys_and_Games/Games/Board_Games/New/)  
(Note that the idea does appear in *my* domain, <http://maldoo.com>)

(a.4) Hence the combination of the elements which are listed above in (a.1), as presented in Claim 1, is novel and inventive over anything that has been published earlier.

**(b) Double Patenting**

(b.1) Rejection for double patenting with respect to Harpaz 6,568,683: To overcome the rejection, I will send a terminal disclaimer with respect to 6,568,683. I explain here why I don't actually agree with the rejection anyway, but this can be ignored because of the terminal disclaimer.

(b.2) Harpaz 6,568,683 claims only elements (2) and (3) of the elements that are listed in (a.1) above. Therefore elements (1), (4) and (5) (the main novelty) are not claimed in 6,568,683, and hence the current application is novel and non-obvious over the claims of Harpaz 6,568,683.

(b.3) The examiner makes 6,568,683 look closer to the current application by mis-representing what 6,568,683 says. In the last line of p.3 and first line of p.4 he says about 6,568,683:

“... the game manager checks for each point the illumination state of the point and of a pattern of points around to insure to insure appropriate movement of a player...”

(b.4) The last part is simply wrong. The check in 6,568,683 is to decide what will be the state of the point in the next period of time, and it happens each short period of time, without any relation to any player's action (6,568,683, Claim 1, column 8, lines 12-16). As explained in 6,568,683 column 3, lines 53-58, this change each period of time (“generation”) is a major part of the innovation in 6,568,683.

**(c) Provisional Obvious type double patenting**

(c.1) Provisional rejections for double patenting with respect to the copending applications 10/031890 and 10/031942: Neither of 10/031890 nor 10/031942 claims *any* of the elements listed in (a.1) above. Therefore the current application is non-obvious over both of them. The examiner ignores these elements completely.

**(d) Claim rejections - 35 USC 102**

(d.1) Rejection of Claim 1 as being anticipated by Golad 6,231,441 (page 6): This rejection is done by attributing to Golad text that it does not contain, and ignoring some of the elements that were listed in (a.1).

(d.2) In his description of the board which is described in Golad 6,231,441, the examiner includes this statement (p.6, lines 3-5 from the bottom, *my italics*):

“... and a game manager evaluating legal moves by each player by *checking in turn each of a pre-defined set of imaginary straight lines emanating from the point to evaluate a correct and incorrect move, ..*”

(d.3) The part in italics is a mis-representation of Golad 6,231,441, because there is nothing in 6,231,441 that can be interpreted this way. This part is actually lifted, almost *verbatim*, from Claim 1 of the current application.

(d.4) The examiner explains this mis-representation in the following text (p.6, last two lines and p.7 top):

“... in which the examiner interprets to be in the computer informing a player on a incorrect move by flashing the correct playing areas on the grid point in straight lines, which is equivalent to applicant's game manager evaluating legal or illegal moves by a player (column 3, line 54 - column 4, line 9).”

(d.5) I did not understand this explanation, and I don't think it is a coherent English text, but it clearly does not contain anything to do with “checking in turn each of a pre-defined set of imaginary straight lines ....”. The text in 6,231,441 that the examiner refers to (column 3, line 54 - column 4, line 9) also does not contain anything that may be interpreted this way. In fact, in the example in 6,231,441 the evaluation is whether the move “traps” or borders an occupied area (column 4, lines 14-17).

(d.6) Of the elements listed above in (a.1), only element (4) is mentioned (in any way) by Golad 6,231,441, and there is nothing in 6,231,441 that could be interpreted as any of the elements (1), (2), (3) and (5). Therefore 6,231,441 clearly doesn't anticipate Claim 1. The examiner reached his conclusion because he mis-represented 6,231,441 to have element (1) and (3) as shown above in (d.2) and (d.3), and ignored elements (2) and (5) altogether.

#### (e) Claim Rejections - 35 USC 103

(e.1) Rejection of Claim 1 as being unpatentable over Blumberg *et al* (5,417,425) in view of Othello (p.7): Of the elements that were listed above in (a.1), only element (4) appears in Othello, and none of the elements appear in Blumberg *et al*. Thus Blumberg *et al* in view Othello still does not present elements (1), (2), (3) and (5). As discussed above in paragraphs (a.2) - (a.4), these elements give a novel and non-obvious combination.

(e.2) The examiner gives the impression that Blumberg *et al* present these elements by attributing to Blumberg *et al* text that is actually from the current application. On p.8, line 3, the examiner writes:

“Blumberg does expressly disclose the following:

When a player touches a point, the games manager checks if it is a legal move, and if it is ....”

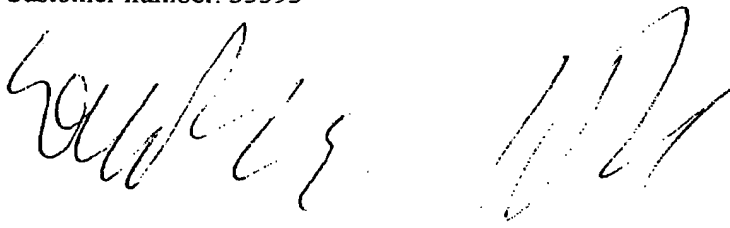
(indented paragraph continues for around half a page)

(e.3) All the indented paragraph is not taken from Blumberg *et al* at all. In fact it is simply the second half of Claim 1 of the current application. There is nothing in Blumberg *et al* that can be claimed to say what is said in this paragraph, by any stretch of imagination. Thus the examiner makes the current application obvious with respect to Blumberg *et al* by

attributing to Blumberg *et al* the most innovative part of claim 1 of the current application. Without the false attribution, Blumberg *et al* in view of Othello is still very very far from the behaviour that is disclosed in Claim 1, because together they contain only element (4).

**f) Informal Claim Objections:** In the claims in the appendix, I removed italization and added spaces between the lines and indentation. The text is identical to the previous version.

Yehouda Harpaz  
Customer number: 33593

A handwritten signature in dark ink, appearing to read 'Yehouda Harpaz', followed by a large, stylized flourish or mark.

## 8. *Appendix - Claims*

### 1 (original) An electronic board comprising:

a grid of grid points on a flat surface, where each grid point is a visible element which is capable of detecting when it is pressed, and can be illuminated in two different colours, allocated to respective players, by an illumination source inside or below the surface; and a character display ; and

a game manager made of

a CPU and memory, connected electronically to the grid points and illumination sources such that it has complete control on which grid point is illuminated and in what colour, and it is notified whenever any of the grid points is pressed, and a computer program which is executed by the CPU,

which manages a one or more games, of which at least one game is played according to these rules:

when a player touches a point, the games manager checks if it is a legal move, and if it switches the point to the player's colour;

to evaluate if a point is a legal move, the games manager checks in turn each of a pre-defined set of imaginary straight lines emanating from the point, assigning a value of 0 to each of these lines that does not pass through an illuminated point, a value of 1 if the closest illuminated point that it passes through is illuminated with the colour of the player, and -1 if it is in the opponent's colour, and then compares the sum of the values of all the lines to a fixed number, and if the sum is larger or equal the point is a legal move for the player;

the games manager declares as winner the player that has more points of their colour in the end of the game.

**Yehouda Harpaz**

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30 July 2005

Re: Application No. 10/031,776 - supplementary appeal brief

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- 2) *Related appeals and interferences*: There are no related appeals or interferences.
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Claims 2-7 - cancelled.  
The appeal is against the rejection of Claim 1.
- 4) *Status of Amendments*: There are no amendments subsequent to final rejection.
- 5) *Summary of claimed subject matter*:

**Claim 1:** The means in Claim 1 is an electronic board which is played by touching points, with a novel behaviour. The behaviour is that, except playing in turns, the sole rule is that a point is a legal move if its 'visibility' for the player is above or equal to some fixed number. The 'visibility' of a point is determined by the board by checking in turn each of a predefined set of imaginary straight lines emanating from the point. If the line does not pass through any illuminated point, it is assigned a value of 0. Otherwise the line is assigned a value of 1 if the closest illuminated point that it passes through is illuminated in the colour of the player, or -1 if it is in the opponent's colour. The sum of the values of the lines is the 'visibility' of the point for the player. The game ends when neither of the players has a legal move, and the player with more points of his/her colour wins.

The board itself is described shortly in the first paragraph of page 2 (lines 1-18), and the conceptual structure of the board is shown in abstract in Figure 1. A more detailed description is given in page 5, lines 8-38, and Figure 2 gives more details of the construction of the board.

The behaviour of the board, which is the main novelty of the claim, is described shortly in page 2, second paragraph (lines 21-31). It is then discussed in length in the last three lines of page 3 and all of page 4. It is illustrated in Figures 4 and 5, but the text on page 4 must be consulted to understand the figures.

The function of the construction in Claim 1 is to produce a novel and innovative game that is simple to play but has a considerable strategic depth, and therefore is a very interesting game. This is discussed in the last paragraph page 5 (line 37-47). This game cannot be realistically played without the construction of claim 1.

- 6) *Grounds for rejection*:

**Double patenting:** Claim 1 was rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent 6,568,683. This is discussed in section 7.b below.



**Provisional Obvious type double patenting:** Claim 1 was provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over the claims of copending applications 10/031890 and 10/031942. This is discussed in section 7.c below.

**Claim rejections - 35 USC 102:** Claim 1 was rejected under 35 U.S.C. 102(e) as being anticipated by Golad 6,231,441. Discussed in 7.d below.

**Claim Rejections - 35 USC 103:** Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Blumberg et al. (5,417,425) in view of Othello (Shadow125 Java Applet). Discussed in 7.e below.

## 7) *Argument:*

### (a) Novelty and non-obviousness of Claim 1

(a.1) As I wrote in (c.5) in the appeal brief, the idea that is expressed in lines 14-22 of Claim 1 of the current application (starting with "when a player touches a point..."), is a combination of the following elements:

- (1) Look at distant points beyond unilluminated points, rather than only illuminated neighbours.
- (2) Use the first illuminated point that is encountered to define the value for a direction (1 for player's colour, -1 for the other colour).
- (3) Sum the values in all directions, rather than just checking if any of the directions fulfils some condition.
- (4) Use the result to decide if a move is legal.
- (5) Use this evaluation as the sole determination of the behaviour of the board during the game, rather than make the evaluation just part of the rules of the game.

(a.2) Element (4) is the only element that can be found in the documents that were found by the ISR and the search in the USPTO, except my own applications. In my first application, (application GB 9907163.1) elements (3) and (4) appear, but not in a combination (they appear in separate games). Element (5) is completely new in the priority document of the current application (GB 9919551), and it is an important innovation, because with simple behaviour it generates a game with considerable strategic depth. It may be possible to dig out documents that show one of elements (1) (2) or (3) on its own, but I am not aware of such documents, and searches don't find them. I am sure that no combination of any two of elements (1)-(4) appears in any prior document. Thus even each element of (1),(2) or (3) on its own is not that obvious, combining any pair of elements (1)-(4) together is quite non-obvious, combining all of them together is very non-obvious, and combining them with element (5) is very very non-obvious.

(a.3) The combination of all these elements together generates a behaviour that is radically different from anything that have been published until now in any context, including all the documents that were cited by the examiner or in the international search report (excluding my other applications which may mention it, but has the same or later priority date). This is true not only in the context of electronic boards, but also video/computer games and classical games. This can be verified by scanning the catalogues of toys and games companies, for example:

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or an online directory of board-games, for example:  
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<http://www.board-games-directory.com>  
[http://dmoz.org/Shopping/Toys\\_and\\_Games/Games/Board\\_Games/New/](http://dmoz.org/Shopping/Toys_and_Games/Games/Board_Games/New/)  
 (Note that the idea does appear in *my* domain, <http://maldoo.com>)

(a.4) Hence the combination of the elements which are listed above in (a.1), as presented in Claim 1, is novel and inventive over anything that has been published earlier.

#### **(b) Double Patenting**

(b.1) Rejection for double patenting with respect to Harpaz 6,568,683: To overcome the rejection, I will send a terminal disclaimer with respect to 6,568,683. I explain here why I don't actually agree with the rejection anyway, but this can be ignored because of the terminal disclaimer.

(b.2) Harpaz 6,568,683 claims only elements (2) and (3) of the elements that are listed in (a.1) above. Therefore elements (1), (4) and (5) (the main novelty) are not claimed in 6,568,683, and hence the current application is novel and non-obvious over the claims of Harpaz 6,568,683.

(b.3) The examiner makes 6,568,683 look closer to the current application by mis-representing what 6,568,683 says. In the last line of p.3 and first line of p.4 he says about 6,568,683:

"... the game manager checks for each point the illumination state of the point and of a pattern of points around to insure to insure appropriate movement of a player...

(b.4) The last part is simply wrong. The check in 6,568,683 is to decide what will be the state of the point in the next period of time, and it happens each short period of time, without any relation to any player's action (6,568,683, Claim 1, column 8, lines 12-16). As explained in 6,568,683 column 3, lines 53-58, this change each period of time ("generation") is a major part of the innovation in 6,568,683.

#### **(c) Provisional Obvious type double patenting**

(c.1) Provisional rejections for double patenting with respect to the copending applications 10/031890 and 10/031942: Neither of 10/031890 nor 10/031942 claims *any* of the elements listed in (a.1) above. Therefore the current application is non-obvious over both of them. The examiner ignores these elements completely.

#### **(d) Claim rejections - 35 USC 102**

(d.1) Rejection of Claim 1 as being anticipated by Golad 6,231,441 (page 6): This rejection is done by attributing to Golad text that it does not contain, and ignoring some of the elements that were listed in (a.1).

(d.2) In his description of the board which is described in Golad 6,231,441, the examiner includes this statement (p.6, lines 3-5 from the bottom, *my italics*):

“... and a game manager evaluating legal moves by each player by *checking in turn each of a pre-defined set of imaginary straight lines emanating from the point to evaluate a correct and incorrect move, ...*”

(d.3) The part in italics is a mis-representation of Golad 6,231,441, because there is nothing in 6,231,441 that can be interpreted this way. This part is actually lifted, almost *verbatim*, from Claim 1 of the current application.

(d.4) The examiner explains this mis-representation in the following text (p.6, last two lines and p.7 top):

“... in which the examiner interprets to be in the computer informing a player on a incorrect move by flashing the correct playing areas on the grid point in straight lines, which is equivalent to applicant's game manager evaluating legal or illegal moves by a player (column 3, line 54 - column 4, line 9).”

(d.5) I did not understand this explanation, and I don't think it is a coherent English text, but it clearly does not contain anything to do with “checking in turn each of a pre-defined set of imaginary straight lines ....”. The text in 6,231,441 that the examiner refers to (column 3, line 54 - column 4, line 9) also does not contain anything that may be interpreted this way. In fact, in the example in 6,231,441 the evaluation is whether the move “traps” or borders an occupied area (column 4, lines 14-17).

(d.6) Of the elements listed above in (a.1), only element (4) is mentioned (in any way) by Golad 6,231,441, and there is nothing in 6,231,441 that could be interpreted as any of the elements (1), (2), (3) and (5). Therefore 6,231,441 clearly doesn't anticipate Claim 1. The examiner reached his conclusion because he mis-represented 6,231,441 to have element (1) and (3) as shown above in (d.2) and (d.3), and ignored elements (2) and (5) altogether.

#### (e) Claim Rejections - 35 USC 103

(e.1) Rejection of Claim 1 as being unpatentable over Blumberg *et al* (5,417,425) in view of Othello (p.7): Of the elements that were listed above in (a.1), only element (4) appears in Othello, and none of the elements appear in Blumberg *et al*. Thus Blumberg *et al* in view Othello still does not present elements (1), (2), (3) and (5). As discussed above in paragraphs (a.2) - (a.4), these elements give a novel and non-obvious combination.

(e.2) The examiner gives the impression that Blumberg *et al* present these elements by attributing to Blumberg *et al* text that is actually from the current application. On p.8, line 3, the examiner writes:

“Blumberg does expressly disclose the following:

When a player touches a point, the games manager checks if it is a legal move, and if it is ....”

(indented paragraph continues for around half a page)

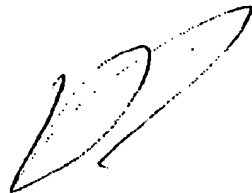
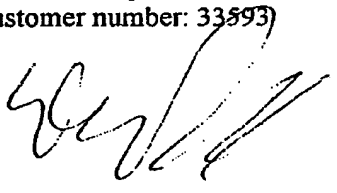
(e.3) All the indented paragraph is not taken from Blumberg *et al* at all. In fact it is simply the second half of Claim 1 of the current application. There is nothing in Blumberg *et al* that can be claimed to say what is said in this paragraph, by any stretch of imagination. Thus the examiner makes the current application obvious with respect to Blumberg *et al* by

attributing to Blumberg *et al* the most innovative part of claim 1 of the current application. Without the false attribution, Blumberg *et al* in view of Othello is still very very far from the behaviour that is disclosed in Claim 1, because together they contain only element (4).

**f) Informal Claim Objections:** In the claims in the appendix, I removed italization and added spaces between the lines and indentation. The text is identical to the previous version.

Yehouda Harpaz

Customer number: 33593



## 8. Appendix - Claims

### 1 (original) An electronic board comprising:

a grid of grid points on a flat surface, where each grid point is a visible element which is capable of detecting when it is pressed, and can be illuminated in two different colours, allocated to respective players, by an illumination source inside or below the surface; and a character display ; and

a game manager made of

a CPU and memory, connected electronically to the grid points and illumination sources such that it has complete control on which grid point is illuminated and in what colour, and it is notified whenever any of the grid points is pressed, and a computer program which is executed by the CPU,

which manages a one or more games, of which at least one game is played according to these rules:

when a player touches a point, the games manager checks if it is a legal move, and if it is switches the point to the player's colour;

to evaluate if a point is a legal move, the games manager checks in turn each of a pre-defined set of imaginary straight lines emanating from the point, assigning a value of 0 to each of these lines that does not pass through an illuminated point, a value of 1 if the closest illuminated point that it passes through is illuminated with the colour of the player, and -1 if it is in the opponent's colour, and then compares the sum of the values of all the lines to a fixed number, and if the sum is larger or equal the point is a legal move for the player;

the games manager declares as winner the player that has more points of their colour in the end of the game.

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- 4) *Status of Amendments:* There are no amendments subsequent to final rejection.

5) *Summary of claimed subject matter:*

**Claim 1:** The means in Claim 1 is an electronic board which is played by touching points, with a novel behaviour. The behaviour is that, except playing in turns, the sole rule is that a point is a legal move if its 'visibility' for the player is above or equal to some fixed number. The 'visibility' of a point is determined by the board by checking in turn each of a predefined set of imaginary straight lines emanating from the point. If the line does not pass through any illuminated point, it is assigned a value of 0. Otherwise the line is assigned a value of 1 if the closest illuminated point that it passes through is illuminated in the colour of the player, or -1 if it is in the opponent's colour. The sum of the values of the lines is the 'visibility' of the point for the player. The game ends when neither of the players has a legal move, and the player with more points of his/her colour wins.

The board itself is described shortly in the first paragraph of page 2 (lines 1-18), and the conceptual structure of the board is shown in abstract in Figure 1. A more detailed description is given in page 5, lines 8-38, and Figure 2 gives more details of the construction of the board.

The behaviour of the board, which is the main novelty of the claim, is described shortly in page 2, second paragraph (lines 21-31). It is then discussed in length in the last three lines of page 3 and all of page 4. It is illustrated in Figures 4 and 5, but the text on page 4 must be consulted to understand the figures.

The function of the construction in Claim 1 is to produce a novel and innovative game that is simple to play but has a considerable strategic depth, and therefore is a very interesting game. This is discussed in the last paragraph page 5 (line 37-47). This game cannot be realistically played without the construction of claim 1.

6) *Grounds for rejection:*

**Double patenting:** Claim 1 was rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent 6,568,683. This is discussed in section 7.b below.

**Provisional Obvious type double patenting:** Claim 1 was provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over the claims of copending applications 10/031890 and 10/031942. This is discussed in section 7.c below.

**Claim rejections - 35 USC 102:** Claim 1 was rejected under 35 U.S.C. 102(e) as being anticipated by Golad 6,231,441. Discussed in 7.d below.

**Claim Rejections - 35 USC 103:** Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Blumberg et al. (5,417,425) in view of Othello (Shadow125 Java Applet). Discussed in 7.e below.

## 7) Argument:

### (a) Novelty and non-obviousness of Claim 1

(a.1) As I wrote in (c.5) in the appeal brief, the idea that is expressed in lines 14-22 of Claim 1 of the current application (starting with "when a player touches a point..."), is a combination of the following elements:

- (1) Look at distant points beyond unilluminated points, rather than only illuminated neighbours.
- (2) Use the first illuminated point that is encountered to define the value for a direction (1 for player's colour, -1 for the other colour).
- (3) Sum the values in all directions, rather than just checking if any of the directions fulfils some condition.
- (4) Use the result to decide if a move is legal.
- (5) Use this evaluation as the sole determination of the behaviour of the board during the game, rather than make the evaluation just part of the rules of the game.

(a.2) Element (4) is the only element that can be found in the documents that were found by the ISR and the search in the USPTO, except my own applications. In my first application, (application GB 9907163.1) elements (3) and (4) appear, but not in a combination (they appear in separate games). Element (5) is completely new in the priority document of the current application (GB 9919551), and it is an important innovation, because with simple behaviour it generates a game with considerable strategic depth. It may be possible to dig out documents that show one of elements (1) (2) or (3) on its own, but I am not aware of such documents, and searches don't find them. I am sure that no combination of any two of elements (1)-(4) appears in any prior document. Thus even each element of (1),(2) or (3) on its own is not that obvious, combining any pair of elements (1)-(4) together is quite non-obvious, combining all of them together is very non-obvious, and combining them with element (5) is very very non-obvious.

(a.3) The combination of all these elements together generates a behaviour that is radically different from anything that have been published until now in any context, including all the documents that were cited by the examiner or in the international search report (excluding my other applications which may mention it, but has the same or later priority date). This is true not only in the context of electronic boards, but also video/computer games and classical games. This can be verified by scanning the catalogues of toys and games companies, for example:

<http://www.hasbro.com/games/>

or an online directory of board-games, for example:

[http://directory.google.com/Top/Games/Board\\_Games/](http://directory.google.com/Top/Games/Board_Games/)

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[http://dmoz.org/Shopping/Toys\\_and\\_Games/Games/Board\\_Games/New/](http://dmoz.org/Shopping/Toys_and_Games/Games/Board_Games/New/)  
 (Note that the idea does appear in *my* domain, <http://maldoo.com>)

(a.4) Hence the combination of the elements which are listed above in (a.1), as presented in Claim 1, is novel and inventive over anything that has been published earlier.

#### **(b) Double Patenting**

(b.1) Rejection for double patenting with respect to Harpaz 6,568,683: To overcome the rejection, I will send a terminal disclaimer with respect to 6,568,683. I explain here why I don't actually agree with the rejection anyway, but this can be ignored because of the terminal disclaimer.

(b.2) Harpaz 6,568,683 claims only elements (2) and (3) of the elements that are listed in (a.1) above. Therefore elements (1), (4) and (5) (the main novelty) are not claimed in 6,568,683, and hence the current application is novel and non-obvious over the claims of Harpaz 6,568,683.

(b.3) The examiner makes 6,568,683 looks closer to the current application by mis-representing what 6,568,683 says. In the last line of p.3 and first line of p.4 he says about 6,568,683:

“... the game manager checks for each point the illumination state of the point and of a pattern of points around to insure to insure appropriate movement of a player...”

(b.4) The last part is simply wrong. The check in 6,568,683 is to decide what will be the state of the point in the next period of time, and it happens each short period of time, without any relation to any player's action (6,568,683, Claim 1, column 8, lines 12-16). As explained in 6,568,683 column 3, lines 53-58, this change each period of time (“generation”) is a major part of the innovation in 6,568,683.

#### **(c) Provisional Obvious type double patenting**

(c.1) Provisional rejections for double patenting with respect to the copending applications 10/031890 and 10/031942: Neither of 10/031890 nor 10/031942 claims *any* of the elements listed in (a.1) above. Therefore the current application is non-obvious over both of them. The examiner ignores these elements completely.

#### **(d) Claim rejections - 35 USC 102**

(d.1) Rejection of Claim 1 as being anticipated by Golad 6,231,441 (page 6): This rejection is done by attributing to Golad text that it does not contain, and ignoring some of the elements that were listed in (a.1).

(d.2) In his description of the board which is described in Golad 6,231,441, the examiner includes this statement (p.6, lines 3-5 from the bottom, *my italics*):



"... and a game manager evaluating legal moves by each player by *checking in turn each of a pre-defined set of imaginary straight lines emanating from the point to evaluate a correct and incorrect move, ..*"

(d.3) The part in italics is a mis-representation of Golad 6,231,441, because there is nothing in 6,231,441 that can be interpreted this way. This part is actually lifted, almost *verbatim*, from Claim 1 of the current application.

(d.4) The examiner explains this mis-representation in the following text (p.6, last two lines and p.7 top):

"..., in which the examiner interprets to be in the computer informing a player on a incorrect move by flashing the correct playing areas on the grid point in straight lines, which is equivalent to applicant's game manager evaluating legal or illegal moves by a player (column 3, line 54 - column 4, line 9)."

(d.5) I did not understand this explanation, and I don't think it is a coherent English text, but it clearly does not contain anything to do with "checking in turn each of a pre-defined set of imaginary straight lines ....". The text in 6,231,441 that the examiner refers to (column 3, line 54 - column 4, line 9) also does not contain anything that may be interpreted this way. In fact, in the example in 6,231,441 the evaluation is whether the move "traps" or borders an occupied area (column 4, lines 14-17).

(d.6) Of the elements listed above in (a.1), only element (4) is mentioned (in any way) by Golad 6,231,441, and there is nothing in 6,231,441 that could be interpreted as any of the elements (1), (2), (3) and (5). Therefore 6,231,441 clearly doesn't anticipate Claim 1. The examiner reached his conclusion because he mis-represented 6,231,441 to have element (1) and (3) as shown above in (d.2) and (d.3), and ignored elements (2) and (5) altogether.

#### (e) Claim Rejections - 35 USC 103

(e.1) Rejection of Claim 1 as being unpatentable over Blumberg *et al* (5,417,425) in view of Othello (p.7): Of the elements that were listed above in (a.1), only element (4) appears in Othello, and none of the elements appear in Blumberg *et al*. Thus Blumberg *et al* in view Othello still does not present elements (1), (2), (3) and (5). As discussed above in paragraphs (a.2) - (a.4), these elements give a novel and non-obvious combination.

(e.2) The examiner gives the impression that Blumberg *et al* present these elements by attributing to Blumberg *et al* text that is actually from the current application. On p.8, line 3, the examiner writes:

"Blumberg does expressly disclose the following:

When a player touches a point, the games manager checks if it is a legal move, and if it is ...."

(indented paragraph continues for around half a page)

(e.3) All the indented paragraph is not taken from Blumberg *et al* at all. In fact it is simply the second half of Claim 1 of the current application. There is nothing in Blumberg *et al* that can be claimed to say what is said in this paragraph, by any stretch of imagination. Thus the examiner makes the current application obvious with respect to Blumberg *et al* by

attributing to Blumberg *et al* the most innovative part of claim 1 of the current application. Without the false attribution, Blumberg *et al* in view of Othello is still very very far from the behaviour that is disclosed in Claim 1, because together they contain only element (4).

**f) Informal Claim Objections:** In the claims in the appendix, I removed italization and added spaces between the lines and indentation. The text is identical to the previous version.

Yehouda Harpaz

Customer number: 33593

A handwritten signature in black ink, appearing to read 'Yehouda Harpaz', followed by a large, stylized flourish or checkmark.

## 8. Appendix - Claims

### 1 (original) An electronic board comprising:

a grid of grid points on a flat surface, where each grid point is a visible element which is capable of detecting when it is pressed, and can be illuminated in two different colours, allocated to respective players, by an illumination source inside or below the surface; and a character display ; and

a game manager made of

a CPU and memory, connected electronically to the grid points and illumination sources such that it has complete control on which grid point is illuminated and in what colour, and it is notified whenever any of the grid points is pressed,

and a computer program which is executed by the CPU,

which manages a one or more games, of which at least one game is played according to these rules:

when a player touches a point, the games manager checks if it is a legal move, and if it is switches the point to the player's colour;

to evaluate if a point is a legal move, the games manager checks in turn each of a pre-defined set of imaginary straight lines emanating from the point, assigning a value of 0 to each of these lines that does not pass through an illuminated point, a value of 1 if the closest illuminated point that it passes through is illuminated with the colour of the player, and -1 if it is in the opponent's colour, and then compares the sum of the values of all the lines to a fixed number, and if the sum is larger or equal the point is a legal move for the player;

the games manager declares as winner the player that has more points of their colour in the end of the game.

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